

# 2011 Annual Drinking Water Quality Report

Consumer Confidence Report (CCR)

PWS ID Number: **TX2500004**

PWS Name: **CITY OF WINNSBORO**

Annual Water Quality Report for the period of January 1 to December 31, 2011

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

For more information regarding this report contact:

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

## Special Notice

Required Language for ALL  
Community Public Water Systems

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The source of drinking water used by  
CITY OF WINNSBORO is Surface Water

## Information on Sources of Water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## Information about Secondary Contaminants

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:  
<http://gis3.tceq.state.tx.us/swaw/Controller/index.jsp?wtrsc=>

Further details about sources and sourcewater assessments are available in Drinking Water Watch at the following URL:  
<http://dww.tceq.texas.gov/DWW/>

### Water Quality Test Results

- Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum residual disinfectant level goal or MRDLG:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum residual disinfectant level or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
- ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- na:** not applicable.
- Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

### Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Halocetic Acids (HAA5)*	8-2011	Levels lower than detect level	0 - 0	No goal for the total	60	ppb	N	By-product of drinking water chlorination.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Total Trihalomethanes (THM)*	8-2011	40	40.4 - 40.4	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
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Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future



Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	3-2011	Levels lower than detect level	0 - 0	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic	3-2011	0.981	0.981 - 0.981	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	3-2011	0.05	0.05 - 0.05	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Beryllium	3-2011	Levels lower than detect level	0 - 0	4	4	ppb	N	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
Cadmium	3-2011	Levels lower than detect level	0 - 0	5	5	ppb	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.
Chromium	3-2011	0.479	0.479 - 0.479	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	3-2011	0.1	0.08 - 0.08	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Mercury	3-2011	Levels lower than detect level	0 - 0	2	2	ppb	N	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
Nitrate [measured as Nitrogen]	3-2011	0.21	0.21 - 0.21	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate Advisory - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Selenium	3-2011	1.68	1.68 - 1.68	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Thallium	3-2011	0.056	0.056 - 0.056	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photons emitters	02/19/2009	4.8	4.8 - 4.8	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	02/19/2009	Levels lower than detect level	0 - 0	0	15	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4,5-TP (Silvex)	3-2011	Levels lower than detect level	0 - 0	50	50	ppb	N	Residue of banned herbicide.
2,4-D	3-2011	Levels lower than detect level	0 - 0	70	70	ppb	N	Runoff from herbicide used on row crops.
Aalachlor	3-2011	Levels lower than detect level	0 - 0	0	2	ppb	N	Runoff from herbicide used on row crops.
Atrazine	3-2011	Levels lower than detect level	0 - 0	3	3	ppb	N	Runoff from herbicide used on row crops.

Benzo(a)pyrene	3-2011	Levels lower than detect level	0 - 0	0	200	ppt	N	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	3-2011	Levels lower than detect level	0 - 0	40	40	ppb	N	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	3-2011	Levels lower than detect level	0 - 0	0	2	ppb	N	Residue of banned termiticide.
Dalapon	3-2011	Levels lower than detect level	0 - 0	200	200	ppb	N	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	3-2011	Levels lower than detect level	0 - 0	400	400	ppb	N	Discharge from chemical factories.
Di (2-ethylhexyl) phthalate	3-2011	Levels lower than detect level	0 - 0	0	6	ppb	N	Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	3-2011	Levels lower than detect level	0 - 0	0	0	ppt	N	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Dinoseb	3-2011	Levels lower than detect level	0 - 0	7	7	ppb	N	Runoff from herbicide used on soybeans and vegetables.
Endrin	3-2011	Levels lower than detect level	0 - 0	2	2	ppb	N	Residue of banned insecticide.
Ethylene dibromide	3-2011	Levels lower than detect level	0 - 0	0	50	ppt	N	Discharge from petroleum refineries.
Heptachlor	3-2011	Levels lower than detect level	0 - 0	0	400	ppt	N	Residue of banned termiticide.
Heptachlor epoxide	3-2011	Levels lower than detect level	0 - 0	0	200	ppt	N	Breakdown of heptachlor.
Hexachlorobenzene	3-2011	Levels lower than detect level	0 - 0	0	1	ppb	N	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	3-2011	Levels lower than detect level	0 - 0	50	50	ppb	N	Discharge from chemical factories.



Lindane	3-2011	Levels lower than detect level	0 - 0	200	200	ppt	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
Methoxychlor	3-2011	Levels lower than detect level	0 - 0	40	40	ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Oxamyl [Vydate]	3-2011	Levels lower than detect level	0 - 0	200	200	ppb	N	Runoff/leaching from insecticide used on apples, potatoes and tomatoes.
Pentachlorophenol	3-2011	Levels lower than detect level	0 - 0	0	1	ppb	N	Discharge from wood preserving factories.
Picloram	3-2011	Levels lower than detect level	0 - 0	500	500	ppb	N	Herbicide runoff.
Simazine	3-2011	Levels lower than detect level	0 - 0	4	4	ppb	N	Herbicide runoff.
Toxaphene	3-2011	Levels lower than detect level	0 - 0	0	3	ppb	N	Runoff/leaching from insecticide used on cotton and cattle.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1,1,1-Trichloroethane	3-2011	Levels lower than detect level	0 - 0	200	200	ppb	N	Discharge from metal degreasing sites and other factories.
1,1,2-Trichloroethane	3-2011	Levels lower than detect level	0 - 0	3	5	ppb	N	Discharge from industrial chemical factories.
1,1-Dichloroethylene	3-2011	Levels lower than detect level	0 - 0	7	7	ppb	N	Discharge from industrial chemical factories.
1,2,4-Trichlorobenzene	3-2011	Levels lower than detect level	0 - 0	70	70	ppb	N	Discharge from textile-finishing factories.
1,2-Dichloroethane	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.
1,2-Dichloropropane	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from industrial chemical factories.

Benzene	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from factories; Leaching from gas storage tanks and landfills.
Carbon Tetrachloride	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from chemical plants and other industrial activities.
Chlorobenzene	3-2011	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from chemical and agricultural chemical factories.
Dichloromethane	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	3-2011	Levels lower than detect level	0 - 0	700	700	ppb	N	Discharge from petroleum refineries.
Styrene	3-2011	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from rubber and plastic factories; Leaching from landfills.
Tetrachloroethylene	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from factories and dry cleaners.
Toluene	3-2011	Levels lower than detect level	0 - 0	1	1	ppm	N	Discharge from petroleum factories.
Trichloroethylene	3-2011	Levels lower than detect level	0 - 0	0	5	ppb	N	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	3-2011	Levels lower than detect level	0 - 0	0	2	ppb	N	Leaching from PVC piping; Discharge from plastics factories.
Xylenes	3-2011	Levels lower than detect level	0 - 0	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.
cis-1,2-Dichloroethylene	3-2011	Levels lower than detect level	0 - 0	70	70	ppb	N	Discharge from industrial chemical factories.
o-Dichlorobenzene	3-2011	Levels lower than detect level	0 - 0	600	600	ppb	N	Discharge from industrial chemical factories.
p-Dichlorobenzene	3-2011	Levels lower than detect level	0 - 0	75	75	ppb	N	Discharge from industrial chemical factories.

Trans-1,2-Dichloroethylene	3-2011	Levels lower than detect level	0 - 0	100	100	ppb	N	Discharge from industrial factories.
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**Turbidity**

		Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.29 NTU	N	Soil runoff.	
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.	

**2011 Regulated Contaminants Detected**

**Coliform Bacteria**

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	There were no TCR detections for this system in this CCR period		0	N	Naturally present in the environment.

**Lead and Copper**

Definitions: Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/03/2010	1.3	1.3	0.092	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/03/2010	0	15	2.5	0	ppb	N	Corrosion of household plumbing system Erosion of natural deposits.

**Maximum Residual Disinfectant Level**

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	DRDLG	Unit of Measure	Source of Chemical
2011	Chloramine	3.25	2.6	3.8	4.0	<4.0	ppm	Disinfectant used to control microorganisms